21(7) AUTHORS:

Zolotov, Yu. A., Alimarin, I. P.

sov/89-6-1-11/33

TITLE:

Separation of Np 239 in Radiochemically Pure State by Using the Recoil of the Nuclei of Fission Products (Vydeleniye Np 239 v radiokhimicheski chistom sostoyanii s ispolinovaniyem

otdachi yader produktov deleniya)

PERIODICAL:

Atomnaya energiya, 1959, Vol 6, Nr 1, pp 70 - 71 (USSR)

ABSTRACT:

UO, is crushed in an agate bowl, and by means of elutriation a fraction of all those particles is produced which precipitate with a velocity of $\leq 2.16 \cdot 10^{-3}$ cm/sec. The concentration of the suspension is determined by weighing. A certain quantity of the suspension is emptied into a glass, diluted, and saturated with calcium nitrate. The solution is very thoroughly stirred and the calcium carbonate is precipitated with concentrated carbonate of ammonia. The precipitate is filtered, washed, and dried. The weight ratio

between UO2 and CaCO3 fluctuated in the various experiments

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between 1:100 and 1:500. The ready mixture is then irradiated in a reactor in the

Separation of Np²³⁹ in Radiochemically Pure State SOV/89-6-1-11/33 by Using the Recoil of the Nuclei of Fission Products

course of 12 to 48 hours with a neutron flux of 7.10 12 to 2.10 13 n/cm².sec. The irradiated sample is dissolved in a small quantity of cold 1.5 n HCl, centrifuged, and washed 2 to 3 times with 1.5 n hydrochloric acid and 3 times with water. The UO2 washed in this way was dissolved in ~2ml

hot concentrated nitric acid, and potassium bromide is added to the solution for neptunium oxidation. The solution $(\sim 0.1 \text{ molar KBrO}_3)$ is then heated for 15 minutes at 90 to 100° C.

After cooling aluminum nitrate is added, and the solution is diluted up to 1.5 mol for $Al(NO_3)_3$ and 1 mol for BNO_3 , after

which it is filled into a measuring bowl for ether extraction. Extraction was carried out 5 to 4 times. Neptunium is recovered from the extracts.

The purity of the Np²³⁹ thus separated was checked on the basis of the half-life. The method described makes it possible to separate Np²³⁹ in the course of 1 to 2 hours, the

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Separation of Np²³⁹ in Radiochemically Pure State 50V/89-6-1-11/33 by Using the Recoil of the Nuclei of Fission Products

active fission products being separated already during the first two minutes.

The mixture of UO, and the carrier substance can be produced quickly and can be easily used for a long time. Instead of CaCO, it is possible to use also other material, which

is easily able to stand the high temperature in the reactor. There are 1 figure and 5 references.

SUBMITTED: Max

March 14, 1958

Card 3/3

APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R002065410018-4"

Card 1/3

SOY/ 20-124-2-24/71 5(2,3) Alimarin, I. P., Corresponding Member, AUTHORS: Academy of Sciences, USSR, Zolotov, Yu. A., Palishin, Ye. S. Extraction of Pentavalent Neptunium (Ekstraktsionnoye izvlecheniye pyativalentnogo neptuniya) TITLE: Doklady Akademii nauk SSSR, 1959, Vol 124, Nr 2, pp 328-330 PERIODICAL: (USSR) Reliable data on the extraction of pentarelent neptunium have hitherto not been available. In the present paper, the authors ABSTRACT: prove that this extraction is possible by using 1-nitroso-2-naphthol solution in n-butyl and isoamyl alcohol at pH 9-10. Indicator quantities of Np239 served for this purpose. The controls were performed with weighable quantities of Np 237. The isotope Np 239 was isolated from uranium which had been irradiated with neutrons (Ref 3). The initial solutions of neptunium-(V) were obtained by reduction of neptunium-(VI) by means of hydrazine in the cold. The results obtained are presented in figure ?. As can be seen from it the neptunium compound cannot be extracted up to pH 6 . The percentage rate of

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extraction is dependent to a considerable extent on the nature

Extraction of Pentavalent Neptunium

SOV/20-124-2-24/71

of the extracting agent; with n-butyl alcohol 90-95% are extractable at one single extraction, with isommyl alcohol 80-85%, whereas methyl-ethyl ketone, chloroform and amyl acetate are far less effective. Benzene and diethyl ether sparingly extract neptunium-(V). Higher amounts of fluorides, carbonates, phosphates, acetates and citrates interfere with the extraction. Nitrates, chlorides and sulfates exert no negative influence. The said extraction is first of all indicative of the interaction of the NpO, ion with 1-nitroso-2-naphthol. Reactions of the neptunium-(V) with organic reagents are unknown with a few exceptions only (complex formation Refs 5, 6). Analytical reactions for Np(V) are missing. The mentioned interaction is in agreement with earlier observed spectroscopic data (Ref 6). The results obtained can be utilized in the separation of neptunium from plutonium and uranium. The extraction of tetravalent plutonium (proved by the authors together with D. Nishanov) took place already at pH 1.0 - 1.5. The investigations are being

Card 2/3

Extraction of Pentavalent Neptunium

SOT/20-124-2-24/71

carried on. There are 1 figure and 6 references, 5 of which are Soviet.

ASSOCIATION: Institut geokhimii i analiticheskoy khimii im. V. I. Vernadskogo

Akademii nauk SSSR

(Institute of Geochemistry and Analytical Chemistry imeni

V. I. Vernadskiy of the Academy of Sciences, UBSR)

SUBMITTED:

October 16, 1958

Card 3/3

C/005/60/000/007/004/004 F031/F004

AUTHOR:

Yu. A. Zolotov

TITLE:

Application of supersonic waves in analytic chemistry

PERIODICAL: Hua Hsüleh T'ung Pao, no. 7, 1960, 28-32

TEXT: The chemical characteristics of supersonic waves, the effect of supersonic waves on electrolytic processes and the application of photo-sonic effects in chemistry are described. In solutions, the speed of a sonic wave depends on the concentration of the solution and obeys the formula

 $C^2 = (1 - V) C_0^2 + V \times 2.32 \times 10^7 \phi_0$

where V = weight of solute; C_0 = sonic speed in solvent or solution; ϕ_0 = crystallizing energy of solutions. Supersonic waves have an effect in many aspects of electrochemistry. The depolarization characteristic will lower electrolytic voltage, cause a change in the properties and composition of the electrolytic precipitate, and

Card 1/3

G/005/60/000/007/004/004 F031/F004

Application of supersonic ...

affect electrolytic current and production rates. Supersonic waves can even out the density of ions around electrodes, reduce polarization of electrodes, and eliminate formation of gases. The fact that when infrared rays absorb gases, a pulse sound may occur can be utilized as a means for photo-sonic analysis of gases. Supersonic oscillation has been used for dispersing, condensing, degasing, and agitating in chemical analysis or for changing oxidation conditions of solutions. Supersonic waves are also significant in lighting sensitive photographic films and have been used to increase the speed of multiphase reactions. Research in hydrosynthesis is significant for research in analytic chemistry. Equation for calculating the magnitude of hydrosynthesis are

 $C = \sqrt{\frac{1}{\beta \phi \cdot \rho}}$

where C s sonic speed; $\beta \phi$ s adiabatic compressibility; β s density;

 $h = \frac{(1 - \frac{\beta}{\beta_0})(100 - g)}{g}$

Card 2/3

Application of supersonic ...

C/005/60/000/007/004/004 F031/F004

where h s number of grams of water entering a solute; g s number of gram of solute in 100 gm of solution β and β_0 s compression coefficients of solution and solvent (water)

 $R = C^{1/2} \underline{M}$

where M molecular weight; /s density; C monic speed; R monic speed not dependent on temperature. The author confides that supersonic waves are being used in solving both theoretical and practical problems of analytic chemistry. The article was translated by Yilan Ta-wen (7086/1129/2455). There are 6 figures. Important English-language references are: Freyer, E. B. J. Am. Chem. Soc. 53, 1313 (1931); Wada J., Shimbo S., J. Acoust. Soc. Amer. 24, 199 (1952) and Chem. Abstra, 48 269 (1954); Sasaki T., Yasumuago T. Ball. Chem. Soc. Japan 26, 175 (1953) and 28,

Card 3/3

3/186/60/002/001/021/022 A057/A129

AUTHOR:

Zolotov, Yu.A.

TITLE:

Problems concerning the chemistry of actinides at the XVII International Congress on Pure and Applied Chemistry.

PERIODICAL: Radiokhimiya, v. 2, no. 1, 1960, 127 - 128

TEXT: The present paper gives short descriptions of some reports at the XVII International Congress on Pure and Applied Chemistry which took place in August - September 1959 in Munich (Western Germany). The present selected reports concern problems of actinide chemistry. Several authors from non-Soviet-bloc countries are quoted, and the following lecturers from Soviet-bloc countries are cited: Erzowska-Tszebiatovskaja, Barteky and Chmylovskaja (Poland) reported on the structure of some uranyl compounds in aqueous solutions, the dependence of solvation of the solution on the dielectric constant, dipole moment and structure of the solvent; Stary (Czechoslovakia) investigated benzoyl acetone complexes in his report: "Determination of the composition and constants of complex formation of some complexes by means of the extraction method"; Ordenić (Yugoslavia) determined the coordination number of U(IV) in acetyl acetone and dialkyl phosphate

Card 1/2

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CIA-RDP86-00513R002065410018-4

Problems concerning the chemistry of actinides.... S/186/60/002/001/021/022 a057/A129 compounds.

SUEMITTED: October 21, 1959

Card 2/2

The master of the control of the con

ZOLOTOV, Yu.A. Symposium on the theory of extraction. Zhur.neorg.khim. 5 no.6: 1391-1392 Je '60. (Extraction (Chemistry) -- Congresses) (MIRA 13:7)

24081 s/186/60/002/006/001/026 A051/A129

21,4200

Alimarin, I. P.; Zolotov, Yu. A.; Pal'shin, Ye. S.

TITLE:

AUTHORS:

The extraction of 1-nitroso-2-naphtholate of pentavalent

neptunium

PERIODICAL:

Radiokhimiya, v. 2, no. 6, 1960, 637 - 642

TEXT: Pentavalent neptunium was extracted at a pH = 9 - 10 using solutions of 1-nitroso-2-naphthol in n-butyl and isoamyl alcohol; and the optimum conditions of the extraction were established. It is thought that the NpO2 ion is capable of forming intra-complex compounds, which can be extracted with organic solvents with a reagent correspondingly selected. The 1-nitroso-2-naphthol was chosen as reagent in this work. It was shown that extraction can be used for purifying neptunium from plutonium and uranium. Indicator quantities of Np²³⁹ separated from uranium irradiated with neutrons according to the method based on the nuclear emission of the decay products (Ref. 15: Y. A. Zelotov; I. P. Alimarin Atomnaya energiya, 6, 1, 70, 1959) and in some cases according to the extraction method by Pal'shin (Ref. 16: E. S. Pal'shin, Y. A. Zelotov, Radiokhimiya, 1, 4, 482, 1959) were used. The effect of a series of factors on the extraction degree

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2h061 8/186/60/002/006/001/026 8051/A129

The extraction of 1-nitroso-2-naphtholate

was studied. The results confirmed that neptunium extraction takes place at a pH over 6. The optimum pH value for each solvent depends in addition to other factors - on the solubility of the reagent in the solvent. Seven solvents were studied: benzene, chloroform, isoamyl alcohol, n-butyl alcohol, diethyl ether, amylacetate, methylethyl ketone. The best solvents for the extraction of 1-nitroso-2-naphtholate proved to be n-butyl and isoamyl alcohol; It is painted out that uranyl 1-nitroso-2-naphtholate is well extracted with alcohols. The extraction of macroquantities of Np237 (0.6 mg/ml) showed that macro-quantities are extracted in the same manner as the indicator quantities. Since the extraction takes place within a pH range where neptunium (V) is quite hydrolyzed, the concentration of the element should be as low as possible to avoid the formation of a hydroxide precipitate. It was seen that large quantities of fluorides, phosphates, carbon nates, oxalates and nitrates hinder the extraction of Np(IV) 1-nitroso-2-naphtholate with n-butyl or isoamyl alcohol at a pH = 9 - 10. Ethylenedimuninetetraacetic acid has a significant negative effect on the extraction. Small quantities offluorides, carbonates and hydrogene peroxide have little effect. Nitrates, chlorides and sulfates have no effect at all. The presence of bornx (buffer solution, concentration 9.05 M) does not impair the extraction, but uranium (VI)

Card 2/5

The extraction of 1-nitroso-2-naphtholate

24081 \$/186/60/002/006/001/026 A051/A129

and plutonium (IV) not bound in the complexes and being highly hydrolyzed have a greatnegative effect. When extracting with a 0.25 % solution of the reagent in isoamyl alcohol from a 0.05 molar solution of borax (pH = 9.24) a complete extraction of Np(IV) is reached as a result of four extractions. Neptunium (V) can be easily extracted from accumulated organic fractions by double washing with a solution of a pH less than 6. In order to produce pure Np239(V), it is suggested using the extraction of nitroso-naphtholate with subsequent reextraction of neptunium in hydrochloric or nitric acid of a given concentration. The following method for Np(V) purification without a carrier is recommended: the initial solution of neptunium not containing interfering Np(V)-ions is processed for the purpose of transferring it to the pentavalent state with a 0.1 M solution of hydrazine-nitrate in 1 M HNO3 at room temperature. The solution is neutralized by a universal indicator and an equal volume of 0.1M borax solution is added. Neptunium is extracted 4 times with equal volumes of a 0.25 % solution of 1-nitroso-2-naphthol in n-butyl or isoamyl alcohol, shaking the funnel each time for 4 minutes. The organic fractions collected (3-minute shaking) are processed twice with small volumes of 0.1 M nitric acid. The combined water fractions are washed with chloroform until the water solution becomes colorless. The coexistence of Np($^{\rm V}$), U($^{\rm VI}$) and Pu($^{\rm IV}$) in solution is accomplished in the easi-Card 3/5

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8/185/60/002/006/001/026 A051/A129

The extraction of 1-nitroso-2-naphtholate

est way by processing the element mixture with sodium nitrite in nitric acid, heating it for a long time. The authors investigated the extraction of Pu(IV) using various solvents (methylethylketone, amylacetate, isoanyl alcohol, n-butyl alcohol, chloroform). It was found that extraction starts at pH = 0.5 - 1.0; alcohol, extracts 1-nitroso-2-naphtholate of Pu(IV) better than isoanyl n-butyl alcohol extracts 1-nitroso-2-naphtholate of Pu(IV) better than isoanyl alcohol. The separation of the elements was found possible in certain cases alcohol. The purification from small quantities of plutonium was accomplished in only. The purification from small quantities of plutonium was accomplished in the following manner: plutonium was bound with a small excess of ammonium sultate and Np(V) was extracted with a solution of 1-nitroso-2-naphthol in isoanyl fate and Np(V) was extracted with a solution of 1-nitroso-2-naphthol in isoanyl alcohol. The main plutonium mass remains non-extracted. If the organic fractions are then washed with an aqueous solution at pH = 3, neptunium (V) is retions are then washed with an aqueous solution at pH = 3, neptunium (V) is retions are then washed with an aqueous solution at pH = 3, neptunium (V) is retions are then washed with an aqueous solution at pH = 3, neptunium (V) is retions are then washed with an aqueous solution at pH = 3, neptunium (V) is retions are then washed with an aqueous solution at pH = 3, neptunium (V) is retions are then washed with an aqueous solution at pH = 3, neptunium (V) is retions are then washed with an aqueous solution at pH = 3, neptunium (V) is retions are then washed with an aqueous solution at pH = 3, neptunium (V) is retions are then washed with a solution of phase. The extracted and partially extracted plutonium remains in the organic fractions. The extracted plutonium temains in the organic fractions are alcohol. The extracted plutonium temains in the organic fraction of phase. The extracted plutonium temains in the organic fraction of phase.

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24081

The extraction of 1-nitroso-2-naphtholate ...

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Chem. Soc., 74, 2103, 1952; D.M. Gruen, J. J. Katz, J. Am. Chem. Soc., 75, 3773, 1953.

SUBMITTED:

July 15, 1959.

Card 5/5

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PETRUKHIN, O.M.[translator]; RODIN, S.S.[translator]; ZOLOTOV, Yu.A.,
kand. khim. nauk, red.; AGGOL*DOV, V.V., red.; GRIEOVA, M.F.,
tekhn. red.

[Extraction in analytical chemistry and radiochemistry] Ekstraktsiie v analiticheekoi khimii i radiokhimii. Monkva,
Izd-vo inostr. lit-ry, 1961. 350 p. (MERA 15:4)
Translated articles.

(Extraction (Chemistry)) (Radiochemistry)

Land 1

s/078/61/006/005/003/015 B121/B208

Zolotov, Yu. A., Marov, I. N., and Moskvin, A. I.

Complex compounds of pentavalent neptunium in solutions of AUTHORS: TITIE:

oxalic acid and ethylene diamine tetrancetic acid

Zhurnal neorganicheskoy khimii, v. 6, no. 5, 1961,

PERIODICAL:

TEXT: The authors studied the complex formation of the NPO2 to with study was carried out statically by observing the distribution of NP used as indicator between a 0.05 M solution of NH₄ClO₄ and the KY-2 (KU-2) cation exchanger in its ammonium form in the cation exchange in the catio cation exchanger in its ammonium form in the presence and in the absence of complexing agents. The experiments were performed at 20 ± 20C. The grain size of the cation exchanger was 50 - 70 mesh. The pH of the solution was measured with a glass electrode and the AW-5 (LP-5) pH-meter. In a pH-range of 2 - 5 Np V was found to form complex ions of the following Card 1/4

S/078/61/006/005/003/015 B121/B20B

composition with oxalic acid MpO2HC2O4, NpO2C2O4 and NpO2(C2O4)2 and corresponding stability constants were: 5.0.102, 1.1 = 104, and Complex compounds of ... 2,3.10⁷. At a pH below 1,6 no neptunium oxalate complexes were obtained. In the pH-range 2,0 - 3,2 NpO₂HC₂O₄ and NpO₂C₂O₄ are formed, and at a pH above 4 NpO₂(C₂O₄)₂. The complex formation is expressed by the follow-

 $NpO_{2}^{+} + HC_{2}^{O}_{4}^{-} \longrightarrow NpO_{2}HC_{2}^{O}_{4}$ $NpO_{2}^{+} + C_{2}^{O}_{4}^{2-} \longrightarrow NpO_{2}C_{2}^{O}_{4}^{-}$ $NpO_{2}^{+} + C_{2}^{O}_{4}^{2-} \longrightarrow NpO_{2}^{-}(C_{2}^{O}_{4})_{2}^{3-}$ $NpO_{2}^{+} + C_{2}^{O}_{4}^{2-} \longrightarrow NpO_{2}^{-}(C_{2}^{O}_{4})_{2}^{3-}$ (12), $NpO_{2}^{+} + C_{2}^{O}_{4}^{2-} \longrightarrow NpO_{2}^{-}(C_{2}^{O}_{4})_{2}^{3-}$ (13).ing equations:

The thermodynamic stability constants of the NpO2 toxalate complexes were compared with published data (Ref. 5: D. M. Gruen, J. J. Katz, J. Amer. Compared with published data (ner.): H. n. Gruen, J. J. MADZ, J. AMEZ. The Chem. Soc., 75, 3772 (1953)); the results are summarized in Table 3. In the pH-range 4.9 - 6.2 neptunium forms with ethylene diamine tetraacetic constant. acid only one complex of the composition NpO2X2 and a stability constant Card 2/4

Complex compounds of ...

S/078/61/006/005/003/015 B121/B208

(4.9 ± 1.1).109. There are 1 figure, 4 tables, and 21 references: 12
Soviet-bloc and 9 non-Soviet-bloc. The four most recent references to
English language publications read as follows: 4. G. Gibson, D. M. Gruen,
J. J. Katz, J. Amer. Chem. Soc., 74, 2103 (1952); 8. J. C. Hindman, L.
B. Magnusson, T. J. La Chapelle, The Transuranium Elements. Nat. Nucl.
En. Sev., Div. IV, 14B, paper 15.2, New York 1949; 9. R. Sjoblom, J. C.
Hindman, J. Amer. Chem. Soc., 72, 1744 (1951); 10. R. M. Diamond, K.
Street, G. T. Seaborg, J. Amer. Chem. Soc., 76, 146 (1954).

ASSOCIATION:

Institut geokhimii i analiticheskoy khimii im. V. I.

Vernadskogo Akademii nauk SSSR

(Institute of Geochemistry and Analytical Chemistry imeni

V. I. Vernadskiy of the Academy of Sciences USSR)

SUBMITTED:

April 8, 1960

Card 3/4

Complex compounds of ...

S/078/61/006/005/003/015 B121/B208

Table 3 Термодинамические константы устойчиности опсалатных компленсных номов NpO₄* (pK_a)

•	Состав номпленса	Даниме (5)	имине Э)
	NpO2HC2O4 NpO2C2O4~ NpO2(C2O4)28~	3,93 7,06	2,70 4,39 7,36

Legend to Table 3: Thermodynamic stability constants of the oxalate complex ions NpO₂⁺ (pK_a): (1) Composition of the complexes; (2) data (Ref. 5); (3) data of the authors.

Card 4/4

25505

S/078/61/006/008/005/018 B121/B203

5 3700

AUTHORS:

Moskvin, A. I., Marov, I. N., and Zolotov, Yu. A.

TITLE:

Complex compounds of pentavalent neptunium with citric and

tartaric acid

PERIODICAL: Zhurnal neorganicheskoy khimii, v. 6, no. 8, 1961, 1813-1820

TEXT: The complex compounds of neptunium with oxy-acids have been little studied. Only Yu. A. Zolotov and Yu. P. Novikov (Ref. 1: Zh. neorgan. khimii 6, 1055, 1961) detected a change in the absorption spectra of neptunium solutions in the presence of complex-forming substances. The complex formation at different pH values was studied by cation exchange between pentavalent neptunium in 0.05 molar NH_AClO_A solution and the

cation exchanger Ky-2 (KU-2) in ammonium form in the presence of citric and tartaric acid. The pH value was measured with an NN-5 (LP-5) pH meter with glass electrodes. In the pH range 4.3 - 5.2, neptunium (V) was found to form the following complexes with citric acid: NpO₂Cit²⁻ and NpO₂HCit⁻ with the stability constants (4.7 ± 1.0)·10⁵ (pK = 3.67) and Card 1/2

APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R002065410018-4"

Complex compounds of ...

8/078/61/006/008/005/018 B121/B203

(4.9 ± 1.4)·10² (pK = 2.69). The absorption spectra of neptunium (V) solutions in the presence of citric acid at pH = 0.9, 3.5, 5.1, 5.7, and 6.1 were recorded. The absorption maximum at 983 mp was found to shift due to complex formation to the side of increased complex formation. The complex formation in the system neptunium (V) - tartaric acid was determined by a change in absorption spectra of neptunium (V) solutions in the presence of tartaric acid at different pH values of the solutions. In the pH range 3.2 - 6.2, neptunium - tartaric acid complexes of the following compositions were determined by cation exchange: NpO₂HTar, NpO₂Tar, NpO₂Tar₂, and NpO₂Tar₃. These complexes have the following stability constants: 2.3 · 10² (pK = 2.36), 2.1 · 10² (pK = 2.32), 2.0 · 10⁴ (pK = 4.30), and 1.5 · 10⁶ (pK = 6.18). There are 7 figures, 3 tables, and 4 Soviet-bloc references.

ASSOCIATION: Institut geokhimii i analiticheskoy khimii im.

ASSOCIATION: Institut geokhimii i analiticheskoy khimii im.
V. I. Vernadskogo AN SSSR (Institute of Geochemistry and Analytical Chemistry imeni V. I. Vernadskiy AS USSR)

SUBMITTED: July 8, 1960

Card 2/2

ZOLOTOV, Yu.A.; ALIMARIN, I.P.

Some aspects of the theory of extraction of inner-complex compounds. Dokl. AN SSR 136 no. 3:603-606 Ja '61. (MIRA 14:2)

1. Institut geokhimii i analiticheskoy khimii imeni V.I. Vernadskogo AN SSSR. 2. Chlen-korrespondent AN SSSR (for Alimarin). (Extraction (Chemistry)) (Complex compounds)

\$/186/62/004/002/010/010 E075/E136

21.4200

AUTHORS: Zol

Zolotov, Yu.A., and Nishanov, D.

PERIODICAL: Radiokhimiya, v.4, no.2, 1962, 241-244

TITLE:

Card 1/2

Chromatographic separation of neptunium from

uranium, plutonium and fission products

TEXT: The authors describe a method of separation of ²³⁹Np from uranium irradiated with neutrons and demonstrated a possibility of separation of Np, Pu and U. Cation exchanger KY-2 (KU-2) in its H form was used as a sorbent, and nitric acid as eluent. The study of elution of pentavalent Np indicated that with 1M nitric acid as eluent Np is eluted very quickly and gives a sharp peak in the elution curve. The main part of the fission products is sorbed on the column and is not eluted by nitric acid. Certain fission elements such as Ru. Te and I are eluted together with Np. The final purification of Np is achieved by extraction with ether after its oxidation to hexavalent state. Experiments were carried out to discover

50

53

Chromatographic separation of ... \$/186/62/004/003/010/010 E075/E136

whether Np(VI) is reduced by cation-exchanger KU+2. It was found that the resin reduced Np(VI) to Np(V) in lM nitric acid. It was shown that Np, Pu and U can be separated easily on the cation-exchanger. Np and U are cluted separately with lM nitric acid followed by elution of Pu with 3M nitric acid. There are 4 figures.

SUBMITTED: April 27, 1961

Card 2/2

5/186/62/004/003/004/022 E075/E436

AUTHORS:

Zolotov, Yu.A., Alimarin, I.P.

TITLE:

Influence of the nature of the solvent on the extraction of internal complex compounds

PERIODICAL: Radiokhimiya, v.4, no.3, 1962, 272-279 The authors investigated the influence of the chemical nature of the solvent on the extraction of a number of internal complex compounds of Np(V), V (VI), Co (II), Ce, Fe and some The solvents used were alcohols, ketones, complex esters, simple esters, halogen substituted hydrocarbons and For each solvent the dependence of the extraction on the pH of the aqueous phase was studied and the comparison of the various solvents was obtained at the optimum pH values. It was shown that Np (V) and Co (II) are extracted readily with solutions of tenoyl trifluoroacetone in butyl alcohol. internal complex compounds in which the coordination forces are not saturated are easier to extract with active oxygen-containing solvents, in particular alcohols, and are usually more difficult to extract with other compounds, such as hydrocarbons and their Card 1/2

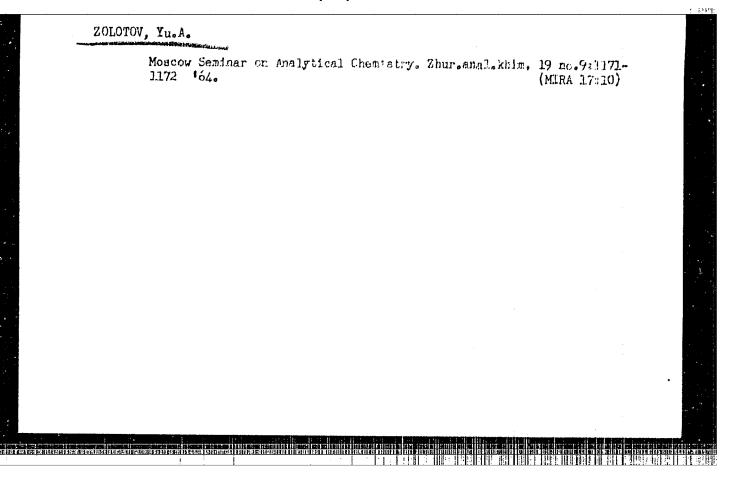
5/186/62/004/003/004/022 E075/E436

halogen substituted derivatives. The extraction of the complex compounds can be made easier by their combination with the excess reagent. In this connection the application of polydentate reagents is considered as possible in the future. The internal complex compounds with saturated coordination valencies are extracted with different types of solvents, including nonpolar oxygen free solvents, such as chlorinated hydrocarbons. A scheme is given for the separation of the complex compounds with saturated and unsaturated coordination valencies. The "saturated" compounds are extracted with the reagent solution in a non-reactive solvent such as benzene; the compounds with the unsaturated coordination often remain in the aqueous phase. Subsequently, the second element is extracted with an active solvent such as butyl alcohol. There are 4 figures and 2 tables.

SUBMITTED: March 25, 1961

Influence of the nature ...

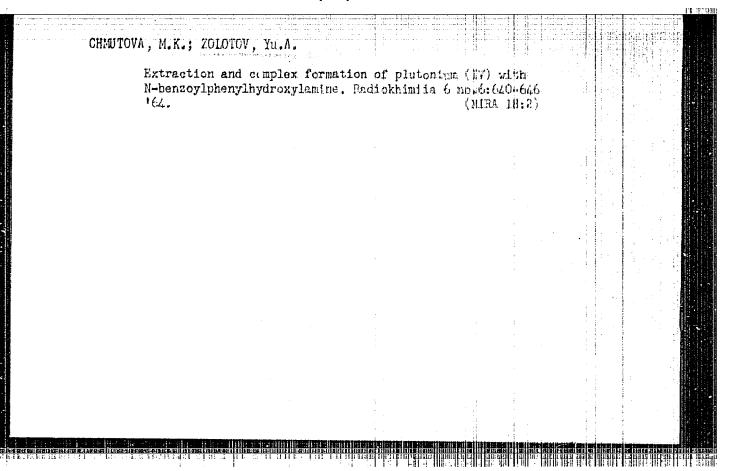
Card 2/2



MILICH, N. [Milic, N.]; PETRUKHIN, O.M.; ZOLOTOV, Yu.A.

Extraction of uranyl thenoyltrifluoroacetonate. Zhur, neorg. khim. 9 no.11:2664-2667 N *64 (MIRA 18:1)

l. Institut geokhimii i analiticheskoy khimii imeni V.V. Vernadskogo AN SSSR i Institut "Boris Kidrich", Belgrad, Yogoslaviya.

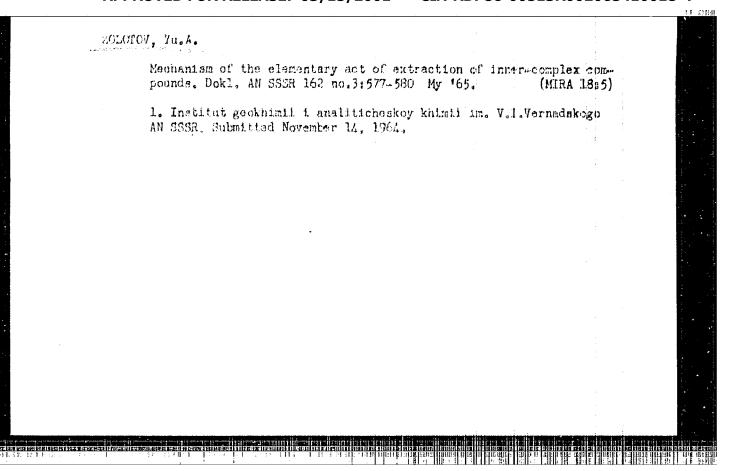


RYABCHIKOV, D.I., otv. red.; ALIMARIN, I.P., red.; PALEY, P.N., red.; BORISOVA, L.V., red.; ZOLOTOV, Yu.A., red.; SENYAVIN, M.M., red.; KARYAKIN, A.V., red.; VOLYNETS, M.P., re

[Modern methods of analysis; methods of studying the chemical composition and structure of substances. On the seventieth birthday of Academician A.P.Vinogrado | Sovremental methods analisa; metody issledovanida khimicheskogo sostava i stroeniia veshchestv. K semidesiatiletiiu akademika A.P.Vinogradova. Moskva; Remka, 1965.

333 p. 744 18:7)

1. Akademiya nauk SSSR. Institut geokhimii i analiticheskoy khimii. 2. Chlen-korrespondent AN SSSR (for Ryabehikov).

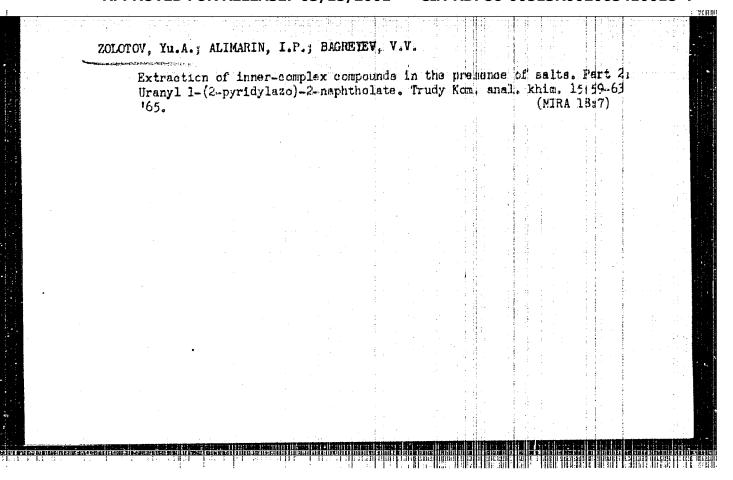


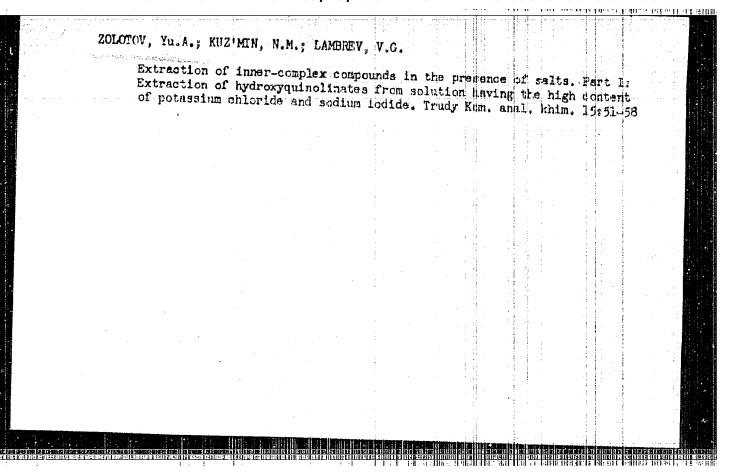
ZOLOTOV, Yu.A.; PETRUKHIN, O.M.; ALIMARIN, I.P.

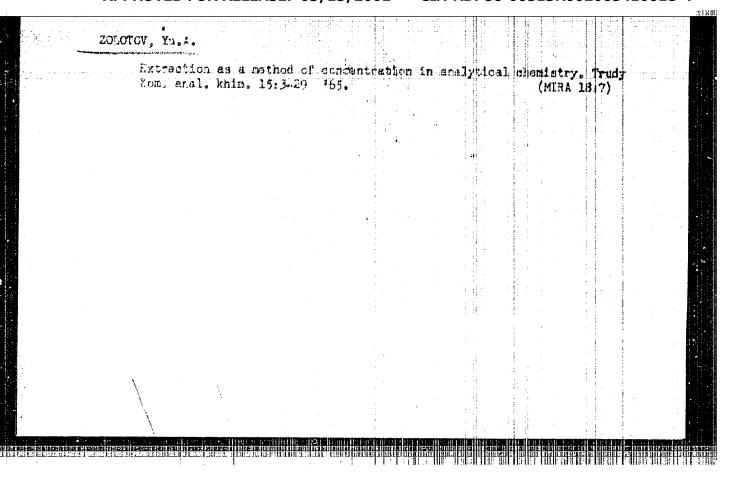
Extraction of ethylenediaminetetracetates (as exemplified by iron and thorium complexes). Zhur. anal. khim. 20 no.3:347-350 '65.

(MIRA 18:5)

1. Institut geokhimii i analiticheskoy khimii imeni Vernadakogo AN SSSR, Moskva.



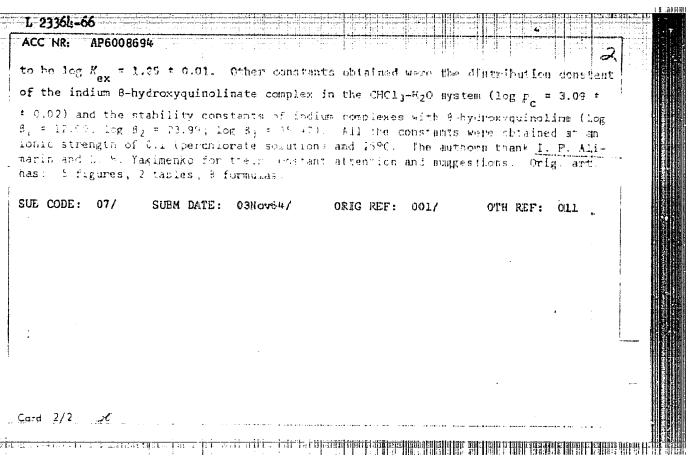




Extraction of thelilon (III) from chloride solutions, thurnerg, khim. 10 no.31777-711 Mr '65. (ESA 1217)

1. Institut geokhimin i analiticheskoy khimil imeni V.I.
Vernadskogo Al Sauh.

 $\frac{1.2336L-66}{1.2336L-66}$ EVT($\frac{1}{1.2336L-66}$ EVT($\frac{1}{1.2336L-66}$ EVT($\frac{1}{1.2336L-66}$ ACC NR AP6008694 SOURCE CODE: UR/4075/65/020/011/1159/1159 30 AUTHOR: Zolotov, Yu. A.; Lambrey, V. G. 28 ORG: Institute of Geochemistry and Analytical Chemistry Im. V. I. Verrandskiy, SSSR, Moscow (Institut geokhimii i amaliticheskov khimali AN BSSR) TITLE: Extraction of india 8-bydroxyouinolinate SOURCE: Zhurnal analiticheskoy khimii, v. 20, no. 11, 1965, 1153-1159 TOPIC TAGS: indius compound, metal extracting, acid base equalibrium, hydroxyl ABSTRACT: The extraction of indium 8-bydroxyquinolinate with chloroform was studied as a function of pH at 8-hydroxyquinoline doncentrations of 0.001, 0.01, and 0.05 M, the concentration of indiam being 5:10 g-100/1 0.1 M solutions of 8-hydroxyculnoline in benzene and iscamyl alcohol were also used. The chloroform extraction was carried out by the direct and reverse methods of reaching equilibrium, and the direct; method was shown to give low results probably because of hydrolysin of indium. pH values for 50% extraction of indium were determined, and the extraction constant for choloroform was found from the equation $In^{3+} + 3 HA_{(0)} \rightleftharpoons In A_{5(0)} + 3 H^{4}$. UDC: Card 1/2



ALIMARIN, I.P.; ZOLOTOV, Yu.A.; KARYAKIN, A.V.; PETROV, A.V.; SUKHANOVSKAYA,

Extraction of thallium (III) compounds from chloride solutions. Zhur. neorg. khim. 10 no.2:524-530 F '65. (MIRA 18:11)

1. Institut geokhimii i analiticheskoy khimii imeni Vernadskogo AN SSSR i Volgogradskiy politekhnicheskiy institut. Submitted May 5, 1964.

BAGREYEV, V.V.; ZOLUTOV, Yn.A.

Extraction of chelate compounds in the presence of salts.
Report 3: Cobalt (II) and uranium (WI) acetyl acetonates.
Zhur. anal. khim. 20 no.8:867-869 '65. (NIRA 18:10)

1. Institut geokhimii i analiticheskoy khimii imeni V.I. Vernadskogo AN SSSR, Moskva.

ZOLOTOV, Yu.A.; LAMBETY, V.C.; CHMUTOVA, M.R.; SIZONENKO, N.T.

Extraction of inner-complex compared to of elements with 1-phenyi-3-methyl-4-benzoyl-5-pyresclene. Boki. AN SSSE 165 no.1:117-120 N 165.

(MIRA 18:10)

1. Institut geokhimii i analiticheskoy khimid dan. V. L. Vernadskogo AN SSSR. Submitted March 29, 1965.

ZOLOTOV, Yu.A.

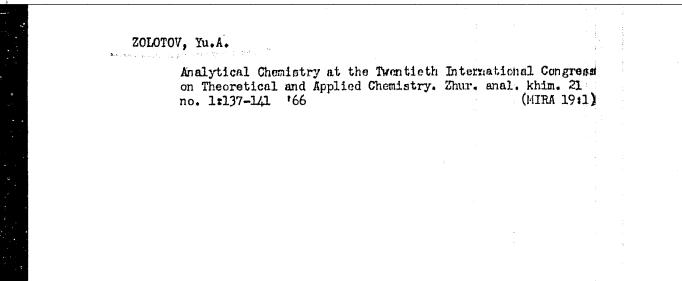
"Sclvent extraction of metal chelates" by J. Stary. Zhur. anal. khim. 20 no.9:1026 '65. (MIRA 18:9)

"APPROVED FOR RELEASE: 03/15/2001 CIA-R

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Extraction of inner-complex consciunts of elements by i-phenyl-3-methyl-4-bend by i-5-phenyl-3-methyl-4-bend by i-5-phenyl-3-methyl-4-bend by i-5-phenyl-4-bend of calcium. Thur, and i khim, no no.6-29-may iog.

1. Inatitut geranimit i ancilliphensoy khonti launz vernadskogo AM COPR, Markta.



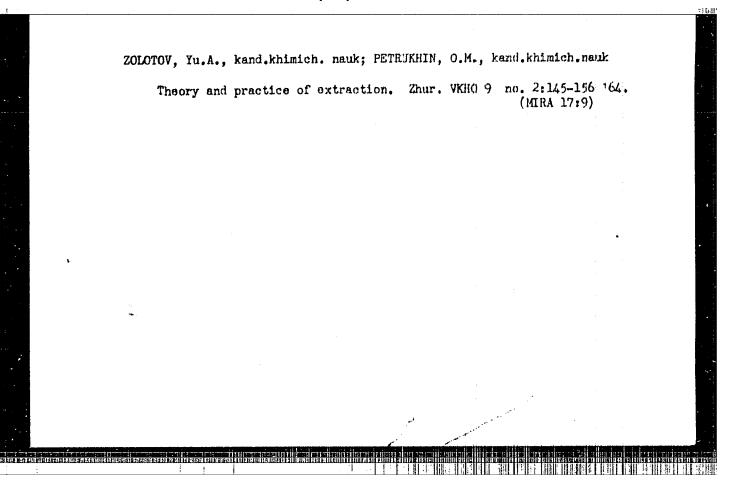
ZOLOTOVITCH, G. [Zolotovich, G.]; DEGEVA, R. [Decheva, R.]

Respiratory intensity of the flower of Rosa damnscena Mill.
Doklady BAN 17 no.7:657-660 '64.

1. Experiment Station for Aromatic Plants, Kazanluk.

ANTIPOVA-KARATAYEVA, I.I.; ZOLOTOV, Yu.A.; SERYAKOVA, I.V.

Spectrophotometric study of chloride complexes of irom (III) in relation to the extraction of iron by oxygen-containing solvents. Zhur. neorg. khim. 9 no.7:1712-1719 J1 (6.4. (MIRA 17:9) l. Institut geokhimii i analiticheskoy khimii imani Vernadskogo AN SSSR.



ZOLOTOV, Yu. A.; ALIMARIN, I.P.; BODNYA, V.A.

Kinetics of extraction; a survey. Zhur. anal. khim. 19 no. 1: (MIRA 17:5)

1. Institut geokhimii i analiticheskoy khimii imeni Vernadskogo i Moskovskiy gosudarstvennyy universitet imeni Lomonosova, Moskva.

SHAKHOVA, N.V.; ALIMARIN, I.P.; ZOLOTOV, Yu.A.

Coextraction of calcium and strontium with hydroxyquinelinates of certain elements. Dokl. AN SSSR 152 no.4:884-887 O '63.

(MIRA 16:11)

1. Institut geokhimii i analiticheskoy khimii im. V.I. Vernadskogo AN SSSR. 2. Chlen-korrespondent AN SSSR (for Alimarin).

PALEY, P.N.; RYABCHIKOV, D.I.; DEDKOV, Yu.M.; ZOLOTOV, Yu.A.

Methods of concentration in analytical chemistry. Zav.lab. 29
no.11:1279-1280 '63. (MIRA 16:12)

CHMUTOVA, M.K.; PETRUKHIN, O.M.; ZOLOTOV, Yu.A.

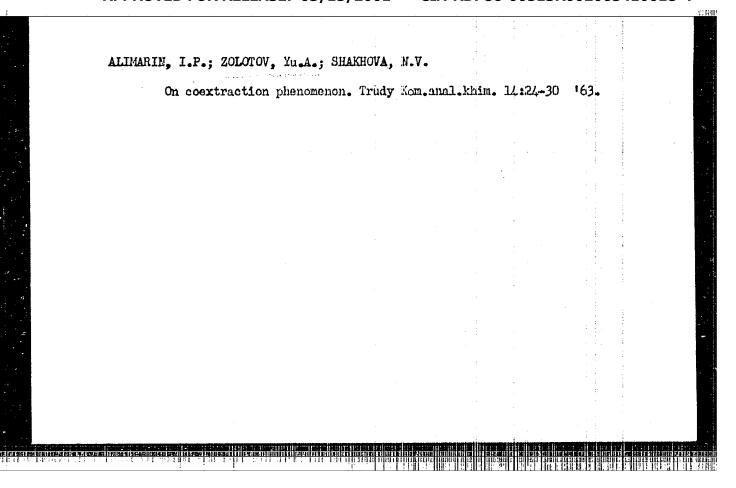
Extraction of inner-complex compounds of plutonium and other elements with N-benzoylphenylhydroxylamine. Ehur. anal. khim. 18 no.5:588-595 My 63. (MIRA 17:2)

SERYAKOVA, I.V.; ZOLOTOV, Yu.A.

Extraction of iron from solutions of chlorides of various metals. Thur, neorgakhim. 9 no.1:187-189 Ja '64.

Extraction of a chloride complex of iron from solutions of parchloric and sulfuric acids. Ibid.:190-195 (MIRA 17:2)

1. Institut geokhimii i analitidheskoy khimii imeni V.I.Vernadskogo AN SSSR.



SERYAKOVA, I.V.; ZOLOTOV, Yu.A.; KARYAKIN, A.V.; GRIBOV, L.A.;

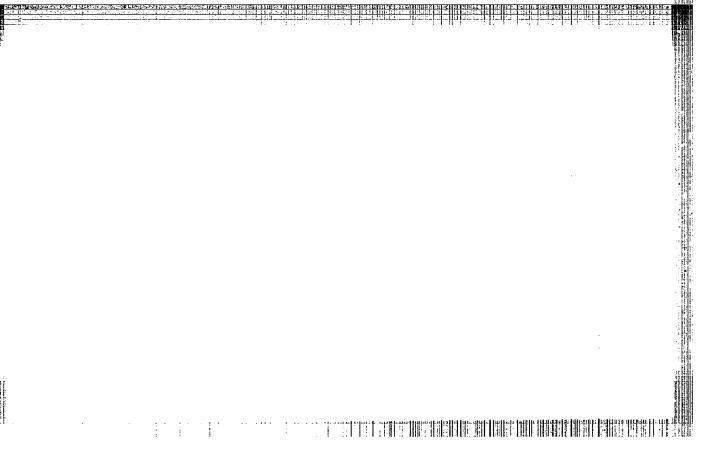
ZUBRILINA, M.Ye.

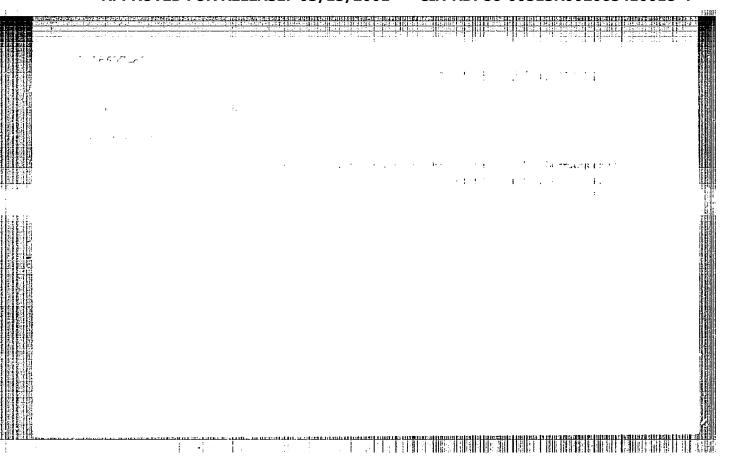
Possibility of the solvation of a tetrachloroferrate ion in the extraction of iron from chloride solutions. Zhur. meorg. khim. 7 no.8:2013-2018 Ag *62. (MIRA 1646)

1. Institut geokhimil i analiticheskoy khimii imeni V.I.

Vernadskogo AN SSSR.

(Ferrates) (Solvation) (Chlorides)





#LIMARIN, I.P.; PETRUKHIN, O.M.; ZOLOTOV, Yu.A.

Extractibility on inner complex compounds as dependent on the pH of the aqueous phase. Minima on the extraction curves. Zhur.— anal.khim. 17 no.5:544-550 Ag '62. (MIRA 16:3)

1. V.I. Vernadskiy Institute of Geochemistry and Analytical Chemistry Academy of Sciences, U.S.S.d., Moscow.

(Chelates) (Extraction (Chemistry))

(Hydrogen-ion concentration)

SERYAKOVA, I.V.; ZOLOTOV, Yu.A.; KARYAKIN, A.V.; GRIBOV, I.A.

Hydration and solvation of strong acids during their extraction.
Zhur.neorg.khim. 8 no.2:474-480 F **163. (MIRA 16:5)

1. Institut reokhimii i analiticheskoy khimii imeni V.I.Vernadskogo
AN SSSR.

(Acids--Spectra) (Extraction (Chemistry)) (Solvation)

Effect of the nature of the organic solvent on the autraction of inner-complex compounds of thallium. Thur.anal. Milm. 17 no.7852-857 0 '62. (MIRA 15:12) 1. Vernadsky Institute of Geochemistry and Analytical Chemistry, Academy of Sciences, U.S.S.R., Moscow. (Thallium compounds) (Extraction (Chemistry)(Solvents)

ZOLOTOV, Yu.A.; SERYAKOVA, I.V.; KARYAKIN, A.V.; GRIBOV, L.A.; ZUBRILINA, M.Ye.

Infrared spectra of some strong acids extracted with oxygen-containing solvents. Zhur.neorg.khim. 8 no.2:481-486 F 163. (MTRA 16:5)

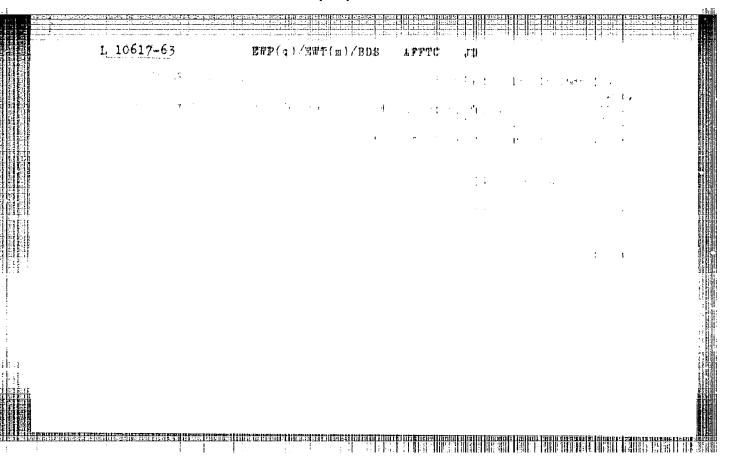
1. Institut geokhimii i analitichaskoy khimii imemi V.I.Vermadakogo AN SSSR.

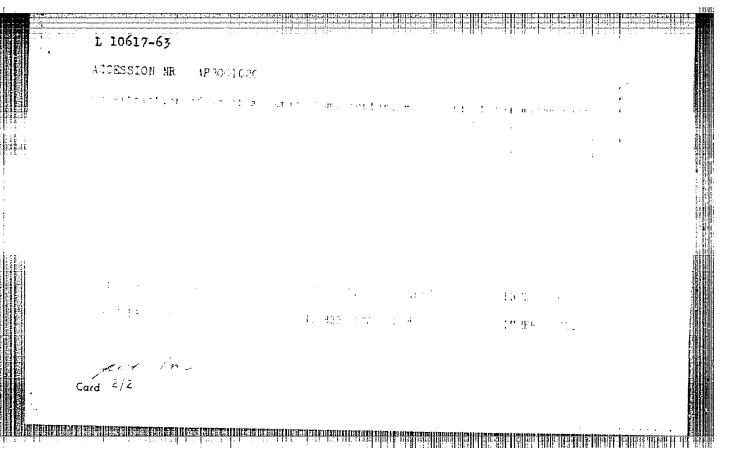
(Acids—Absorption spectra) (Solvents)

New method for increasing the selectivity during the extraction of inner-complex compounds. Zhur.anal.khim. 18 no.44425-429
Ap '63.

1. V.I.Vernadsky Institute of Geochemistry and Analytical Chemistry, Academy of Sciences, U.S.S.R., Moscow.

(Chelates) (Extraction (Chemistry))





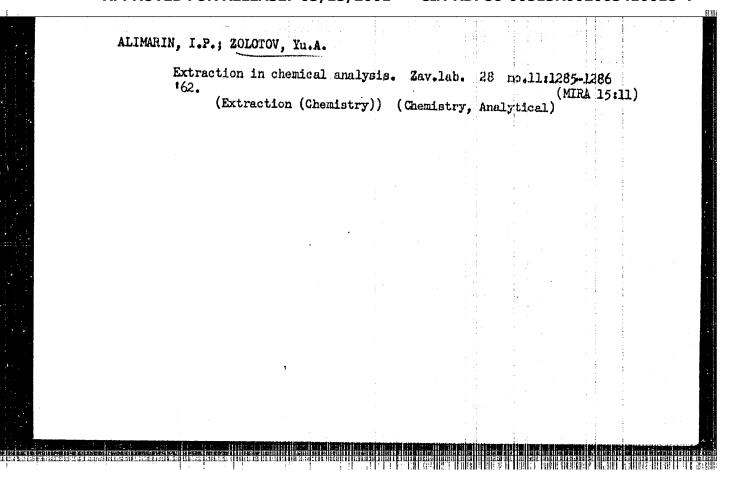
Periodical and monographic literature on extraction. Zav.lab. 28 no.11:1404-1408 '62. (MIRA 15:11) (Bibliography--Extraction (Chemistry))

Hydratio Usp.khim	Hydration and solvation of acids and salts during extraction. Usp.khim. 32 no.2:220-238 F '63. (HIRA 16:4)				
1. Insti	tut geokhimii ogo AN SSSR.	i analitiches	aliticheskoy khimii inani V.I.		
VOIRAGEA	(Acids)	(Extraction	(Chemistry))	(Salts)	
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ZOLOTOV, Yu. A.; ALIMARIN, I. P.

Effect of the nature of the solvent on the extraction of chelates. Radiokhimiia 4 no.3:272-279 62. (MIRA 15:10)

(Chelates) (Solvents)



Extraction of chelate compounds and the coordination number of the central atom. Acta chimica Hung 32 no.3:327-335 '62. 1. Institut geokhimii i analiticheskoy khimili imeni V.I. Vernadskogo Akademii nauk SSSR.

ZOLOTOV, Yu.A.; SERYAKOVA, I.V.; KARYAKIN, A.V.; GRIBOV, L.A.; ZUBRILINA, M.Ye.

Hydrate-solvate mechanism of extraction. Dokl.AN SSSR 145 no.1:100-103 Jl '62. (MIRA 15:7)

1. Institut geokhimii i analiticheskoy khimii imeni V.I.Vernadskogo AN SSSR. Predstavleno akademikom A.P.Vinogradovym. (Extraction (Chemistry))

ZOLOTOV, Yu.A.; SERYAKOVA, I.V.; ANTIPOVA-KARATAYEVA, I.I.; KUTSENHO, Yu.I.; KARYAKIN, A.V.

Effect of the organic solvent on the formation of the tetrachloroferrate ion during extraction of iron from chloride solutions. Zhur.neorg.khim. 7 no.5:1197-1203 My 162. (MIRA 15:17) (Iron) (Chlorides) (Extraction (Chemistry))

ALIMARIN, I.P.; ZOLOTOV, Yu.A.

Nomencloture of extraction. Zhur.anal.khim. 17 no.2:263-266 Mr-Ap '62. (MIRA 15:4)

1. Institut geokhimii i analiticheskoy khimii imani V.I.Vernadskogo AN SSSR, Moskva.

(Extraction (Chemistry)--Nomencloture)

CHUSOV, V.G.; ZOLOTOV, Yu.I.

Testing and improving a uniflow disk-knife grinder. Trudy TSNISP no.7:101-105 *59. (MIRA 13:9)

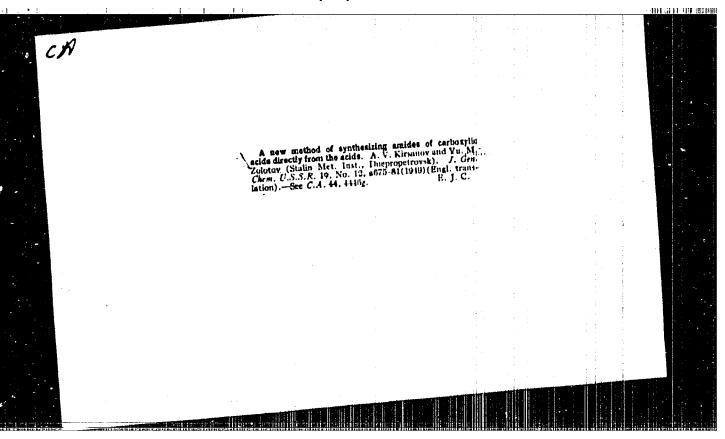
(Grinding machines)

GAVALOV, I.V.; ZOLOTOV, Yu.I.

KS-200 control apparatus. Spirt.prom. 26 no.2:12-14 '60.
(HIRA 13:6)

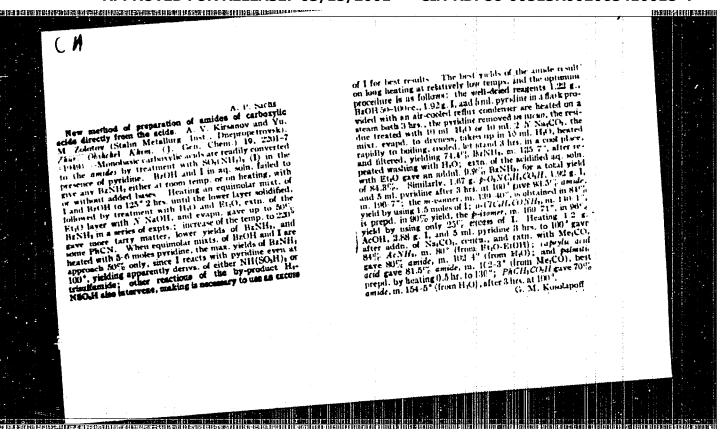
(Alcohol)

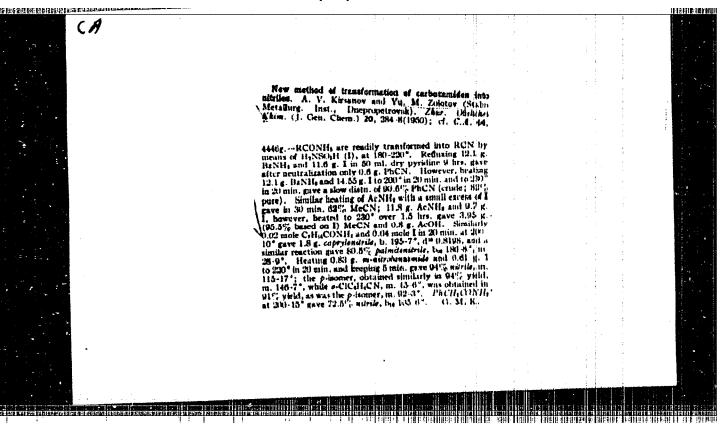
KOLOSKOV, S. P.; ZOLOTOV, Yu. I. Mechanized washing of fermentation tanks. Spirt, prom. 29 no.3:24-26 '63. (MIRA 16:4) 1. Veseoyusnyy nauchno-issledovatel'skiy institut fermentney i spirtowoy promyshlennosti. (Fermentation-Equipment and supplies)

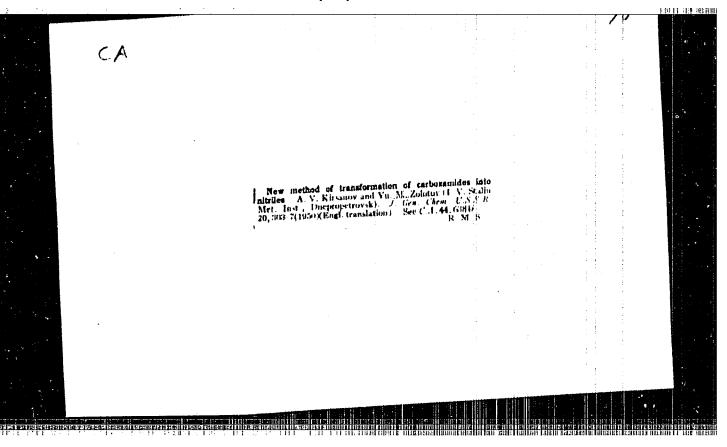


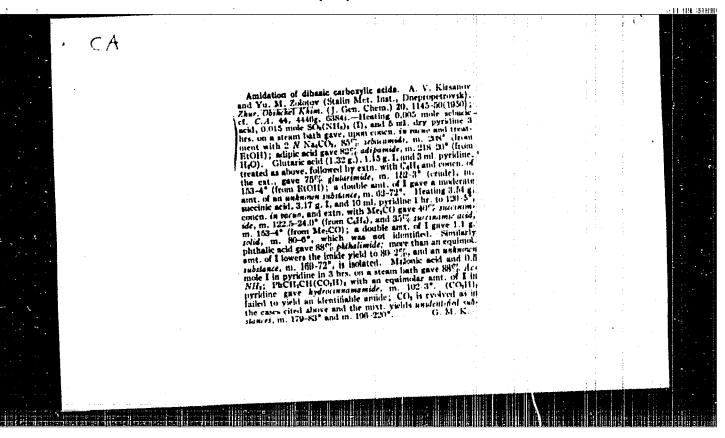
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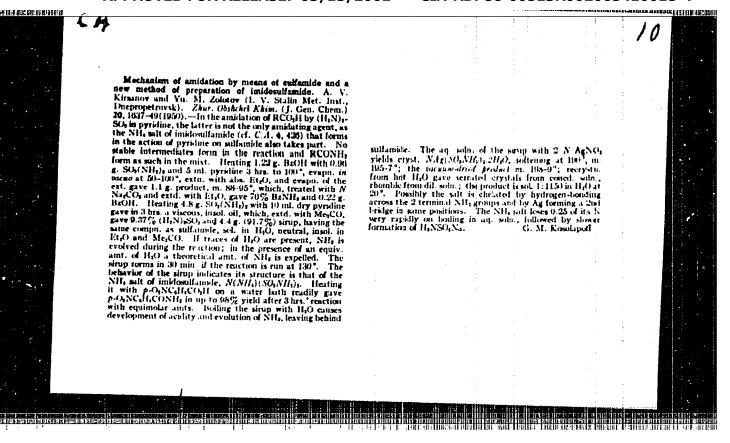
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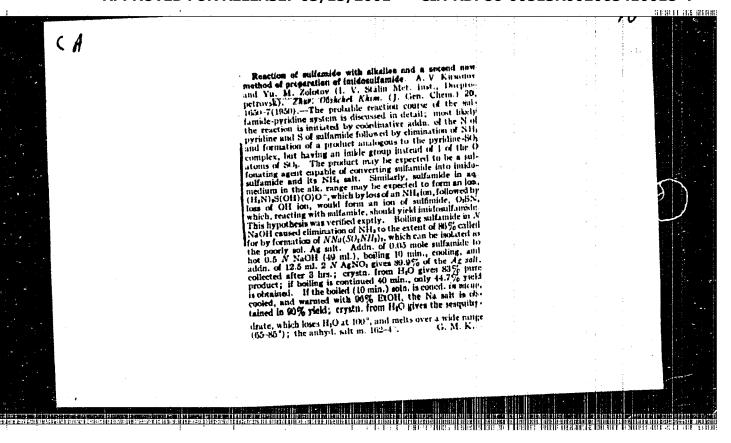








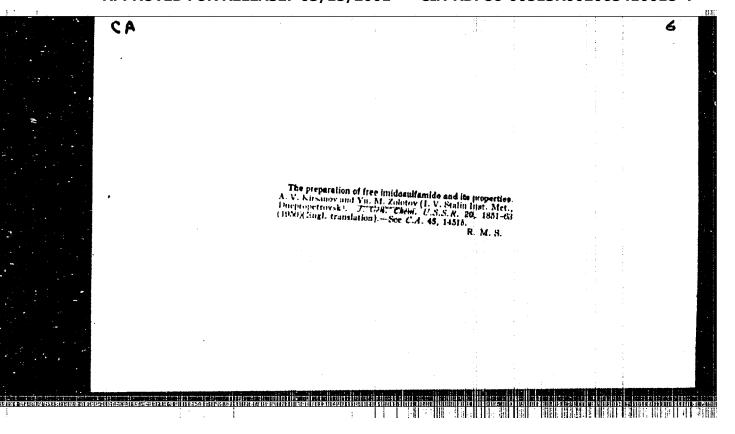


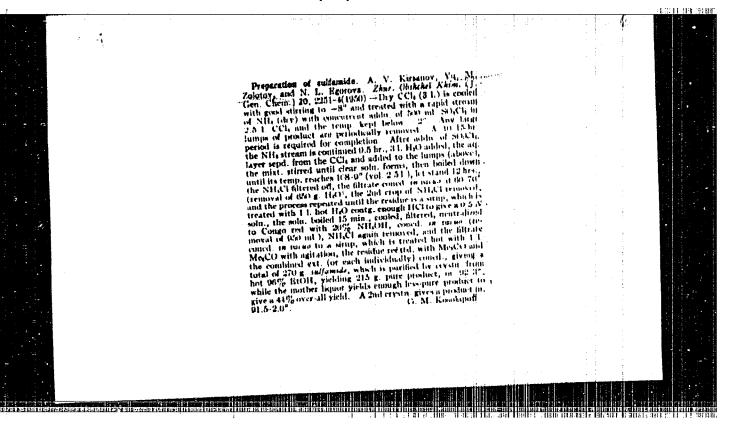


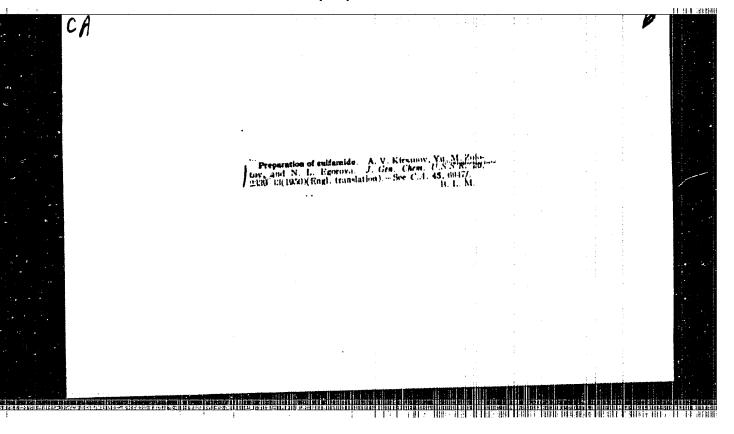
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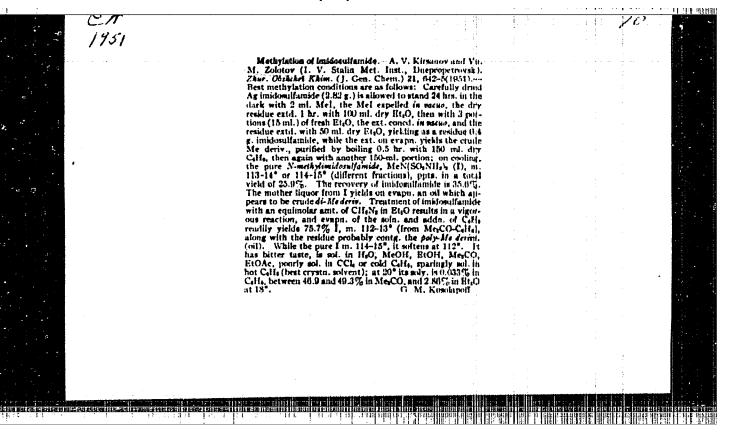
Free imidosulfamide and its properties. A. V. Khranov and Yu. M. Zalotov (I. V. Staim Metallurg, Inst., Dispropertovsk). "Zhar-Ofskhel Khim. (J. Gen. Chem.) 20, 1700-1801(1960).—The free NH₂SO₁NHSO₂NH₂ (I) was obtained in 80% yield by decompn. of the Na salt in aqueola, with 0.9 equiv. of 11,80, at 0° and subsequent evaporation, with 0.9 equiv. of 11,80, at 0° and subsequent evaporation. Na salt were obtained with the use of a mixt. of 90% of the chooretical amt. of H₂SO₂ with a slight excess of NH₂SO₂H. The crude Im. 164-71%; once-recrystid, material m. 103-4%, twice-recrystid. m. 167-9°; no further change in m.p. occurred on subsequent recrystas. The product is readily soil, with evolution of heat, in 14,0 and Me₂CO₂ soil in FiOH and in RiOAc, practically instit. in Calis. The contents of I in 100 g. of said, soils, at 20° are: in 14,0, 30.1-in 30.4 g., in Me₂CO 33.0-35.9 g., in BtOH 8.9-9.7 g., in BtOAc 4.79 g., in EtOAc 3.79 g., in EtOAc 4.79 g., in EtOAc 5.79 g., in Situation, and evaporate of the said at room temp., soils of the residue in a small amt. of also Me₂CO and dillo, with 3 vols. of Calla. The preliminary treatment with EtOAc is necessary for the removal of the NH₂SO₂II, which is insol. in EtOAc but is sol. in Me₂CO to the extent of 0.3 g./100 g. After a 2nd recrystin from Me₂CO + Calla, the product is snow-white needles. Now evaporate of solns. In Me₂CO or RtOAc gives a sint, with the NH₂SO₂II, but cryoscopic detor. in 11₁O gives a sint, with

roughly and that formula. Complete hydrolysis gives I + 1100 -> NH₂HO₁NH₂ + NH₂SO₂H, which confirms the structure formula. I is a attrong soid and is accurately ritrated both with phenolphitakin and with methyl orange, By colorimetry, a 0.01. V solin, of I has a pH of 2.25; is 0.001 N solin, 3.05. By cryscopy, 0.01-0.03 N solin, of I in H₂O are alminst completely district. The rate of byj-dealysis of I in H₂O crub by hollowed by scalings based on the hydrolysis in 0.23 A solin, at 100, 40, and 50°, was of the hydrolysis in 0.23 A solin, at 100, 40, and 50°, was of the hydrolysis in 0.23 A solin, at 100, 40, and 50°, was of the hydrolysis in 0.23 A solin, at 100, 40, and 50°, was detd, to 10% = 0.111, 1.78, and 6.17, u.sp., and the hafteness to 17.3 hrs., 55, and 19 min, russ). These data are accurate only to within = 10%. They definitely contradict Hantsch's (Her. 49, 3400 (1801)) according to the end of instantaneous hydrolysis of I in 140. The following salts of were people; g (NH₂SO₂)₁N, NH₂, sol. in H₂O, spatiately sol. in cold, wingswhat more in wasm £(OH, transparing thin meeties, northlygroscopic, softening at 144°, m. 115–18° to a tuitid liquid; the aq. soln, is neutral to Congo. The Ag salt proped, by neutralization of I with NaOH and sodn, of an equiv, and, of AgNCs is identical with the solf obtained by arties of NaOH on SO₂(NH₂)₂. The Ba self, Ba(NH₂CS)₃, sol, in H₂O, sparingly sol, in cold fittoli and Me₂(C), softening at 130°, Calk, NH₂SO₃, sol, in H₂O, sol, in the H₂O sold in the cold stole and Me₂(C), softening at 131°, and and myrelia and the Cu solts, not directed input mentral to Congo), sparingly sol, in cold fittoli and Me₂(C), softening at 131°, and the Cu solts, not directed input mentral to Congo), sparingly sol, in cold fittoli and Me₂(C), softening at 131°, and solution of prison, in 131-18° to a clarked liquid becoming learn at 135°. The solution of prison, in 131-18° to a clarked liquid becoming there in 135°.



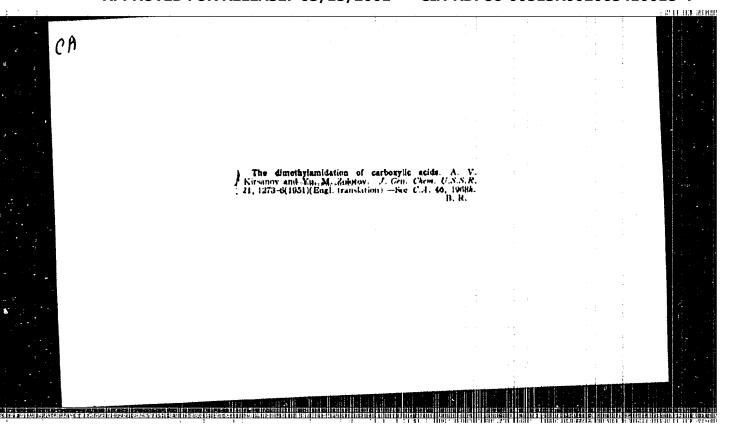


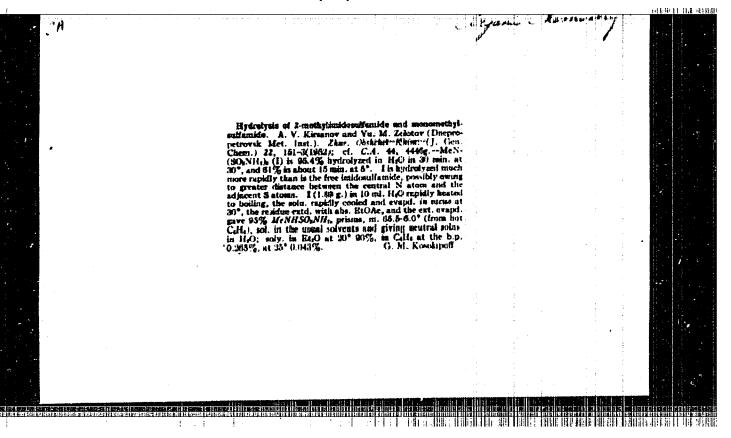




"The dimethylamidation of carboxylic acids." A. V. Kirsanov and Kita Me. Folotov. (p. 1166)

SO: Journal of General Chemistry (Zhurnal Obshchei Khimil) 1951, Vol. 21, No 6.





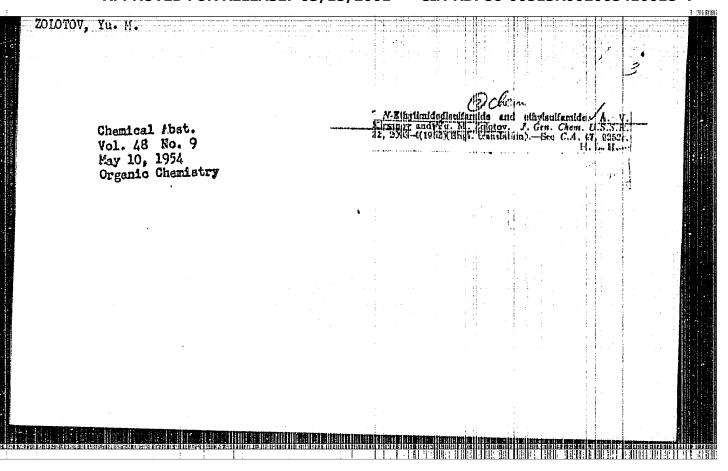
USSR/Chemistry - Sulfur Organic Compounds Now 5R

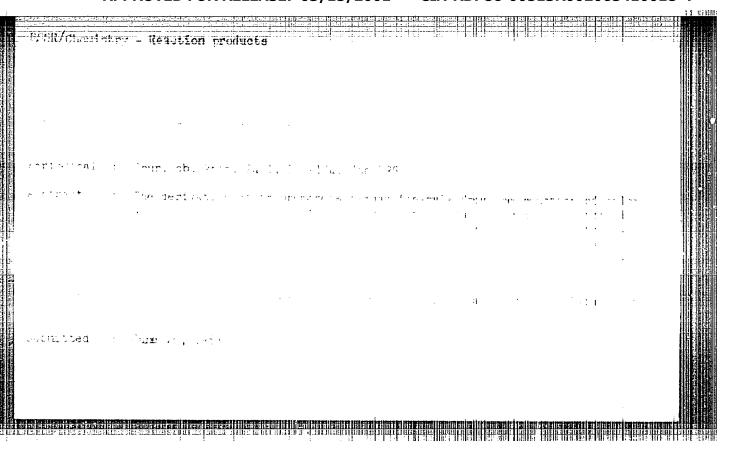
"3-Ethylimidosulfamide and Ethylsulfamide," A. V.
Kirsanov and Yu. M. Zolotov, Chair of Org Chem,
Dnepropetrovsk Metallurgical Inst imeni I. V. Stalin.

"Zhur Obshch Khim," Vol 22, No 11, pp 2038-2040

3-ethylimidosulfamide was obtained by the action of ethyl iodide on the silver salt of inidosulfamide and by the action of diazoethane on free inidosulfamide. Its properties were described. By the hydrolysis of 3-ethylimidosulfamide, ethylsulfamide was obtained, and its properties were also described.

238737





Kirsanov, A. V., Zolotov, IU. M.- "3-Ethyl imidosulfamide and ethyl sulfamide."
(p. 2038)

SO: Journal of General Chemistry, (Zhurnal Obshchei Khimii), 1952, Vol. 22, No. 11

2 OLOTOV. YU. M.

AUTHORS:

Kirsanov, A. V., Zolotov, Yu. M.

79-2-14/64

TITLE:

Substituted Imido- and Monoarylaulfamides (Zameshchennyye imido- i monoarilaulfamidy)

PERIODICAL:

Zhurnal Obshchey Khimii, 1958, Vol. 28, Mr 2, pp. 343 - 347 (USSR)

ABSTRACT:

Imidosulfamide formerly was a practically unattainable substance (reference 1) and the substituted imidosulfamides were unknown. At present the imidosulfamide is absolutely attainable (reference 2) and 3-methyl- and 3-ethylimidosulfamides (reference 3) were produced from it. 1- and 1,5-substituted imidosulfamides were hitherto unknown. According to its chemical properties the free imidosulfamide is a monobasic acid which in strength is almost not inferior to sulfuric or hydrochloric acid. The method (reference 2) proved to be suitable for the production of 1,5- disubstituted and 1,1,5,5-tetrasubstituted imidosulfamides. Thus this nethod is algeneral acthod for the production of as well nonembaticated as of 1,5-diand 1,1,5,5-tetrasubstituted imidosulfamides according to the scheme $2R_2NSO_2NH_2+OH^- \longrightarrow NH_3+M_2O^- + (R_2NSO_2NSO_2NR_2)^-$, where R may be hydrogen, alkyls or aryls. In the case of 1,5-diphenylimidosulfamide the initially forming unstable phenylsulfaminic acid (reference 4) is at once hydrolized and forms an acid aniline-sulfate.

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Substituted Imido- and Monoarylsulfamides

The scheme suggested for the formation of the imidosulfamide by means of an alkali liquor (reference 2) is designated as false, which is proved by the formation of (I) and (II) from N,N-dimethyl-sulfamide and N,N'-diphenylsulfamide. The production of imidosulf-amide from sulfamide and tertiary bases may take place according to the scheme

NH2SO2NH2 + Py PyH + NH2SO2NH etc. When all

schemes determined by the authors should be correct, it must be possible to obtain substituted imidosulfamides from all substituted sulfamides with the exception of tetrasubstituted ones. This conclusion is at present examined. For the synthesis of other 1,5-disubstituted imidosulfamiks it was necessary to obtain monosubstituted sulfamides of the type RNHSO_NH2. These compounds were obtained by Denivell, Battegay and Meybek (reference 5) in quite a complicated manner. Paken (reference 7) produced butyl-, cyclohexyl- and piperidylsulfamides in a simpler manner by the influence of sulfamide upon the corresponding amines. Paken does not say anything on the production of N-monoarylsulfamides according to this scheme. Therefore the authors decided to determine the possibility of the production of N-arylsulfamides by the influence of aromatic amines upon sulfamides. It became evident that the aromatic amines on heating easily react with sulfamide. The yield of monoarylsulfamides

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